

## ABSTRACT

## ANTENNA ARRANGEMENT

5 A wireless terminal has an antenna arrangement including one or more antennas (102a, 102b) designed to reduce substantially currents flowing on ground conductors (104a, 104b, 104c) within the device. In known terminals, these currents generate radiation of unwanted polarisations and radiation in unwanted directions, and can also reduce radiation efficiency.

10 The antenna arrangement of the present invention employs antennas (102a, 102b) having an electrical length of slightly more than half a wavelength. The feed currents drawn from the ground conductors (104a, 104b, 104c) are then out of phase with the current flowing on most of the antenna and therefore cancel with induced currents. The total current flowing in the  
15 ground conductors (104a, 104b, 104c) is reduced, thereby minimising radiation from these conductors and improving overall radiation characteristics. Further, the input impedance of the antenna (102a, 102b) remains reasonable.

(Figure 1)

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